

DELPHION

No active trail

Select CR

Top Tracking

RESEARCH

PRODUCTS

INSIDE DELPHION

Log Out Work Files Saved Searches

My Account

Search: Quick/Number Boolean Advanced Derwent

Help

The Delphion Integrated View

Get Now: ☒ PDF | [More choices...](#)Tools: Add to Work File: [Create new Work File](#) ☒ [Add](#)View: INPADOC | Jump to: [Top](#) ☒ Go to: [Derwent](#)☒ [Email this to a friend](#)Title: **JP03034466A2: VERTICAL-TYPE DOUBLE DIFFUSED MOSFET**Derwent Title: Vertical type double diffusion MOSFET - incorporates semiconductor layer with layer having high specific resistance and layer having low specific resistance NoAbstract Dwg 1/4 [\[Derwent Record\]](#)

Country: JP Japan

Kind: A

Inventor: SAKAI TATSURO;
YANAI TOSHIAKI;
SERADA TAKATSUGU;Assignee: NIPPON TELEGR & TELEPH CORP <NTT>
[News, Profiles, Stocks and More about this company](#)

Published / Filed: 1991-02-14 / 1989-06-30

Application Number: JP1989000166786

IPC Code: H01L 29/784;

Priority Number: 1989-06-30 JP1989000166786

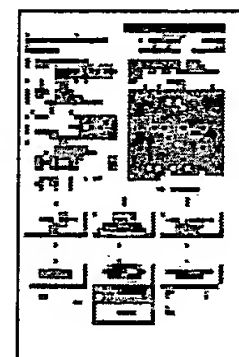
Abstract: PURPOSE: To enable reduction of an ON-resistance without impairing an element breakdown strength by a method wherein the thickness of a second semiconductor layer of low resistivity on the side of a channel forming region is made larger than the depth of diffusion of the channel forming region.

CONSTITUTION: An N-type epitaxial layer 2 in a conventional vertical-type double diffused MOSFET is constructed of two layers, a first epitaxial layer 2-1 and a second epitaxial layer 2-2. The first epitaxial layer 2-1 has the same impurity concentration as the epitaxial layer 2 in the conventional verticaltype double diffused MOSFET, while the second epitaxial layer 2-2 has a higher impurity concentration than the first epitaxial layer 2-1 and has a low resistivity. Even when the thickness of the second epitaxial layer 2-2 is made larger than the depth of diffusion of a P-type channel forming region 5, an element breakdown strength can be kept equivalent to the one of the conventional vertical- type double diffusion MOSFET.

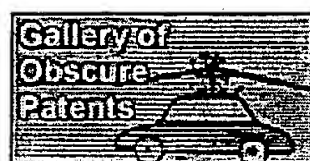
COPYRIGHT: (C)1991,JPO&Japio

Family: None

Other Abstract Info: DERABS C91-090279 DERC91-090279

[View Image](#)

1 page



[Nominate](#)

[this for the Gallery...](#)



THOMSON

Copyright © 1997-2005 The Thomson Corporation

[Subscriptions](#) | [Web Seminars](#) | [Privacy](#) | [Terms & Conditions](#) | [Site Map](#) | [Contact Us](#) | [Help](#)